

ABSTRACT OF THE DISCLOSURE

A power turbine speed control system for a helicopter is disclosed which includes components for generating a power turbine speed signal based upon a demanded rotor speed, a high-order filter for filtering the power turbine speed signal by effectuating a rapid
5 attenuation of main and tail rotor torsional frequencies in the power turbine speed signal without compromising phase at low frequencies, and a governor for providing isochronous power turbine speed and rotor speed control based upon the filtered power turbine speed signal.

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